XRSAG Debrief to PhysPAG Jay Bookbinder

Washington DC 2012-08-16

What transpired

- An introduction to the community of the XRSAG charter, goals
- "Programmatic" presentations
 - What is happening in Europe & Japan
 - Mission Costing Methodology
 - PATR process, needs, etc
 - CST follow-up: next steps
- Technology presentations
 - Optics
 - Detectors
- Open discussion
 - Paths forward for the community
 - XRSAG tasks and "working groups"
 - Inputs to the PhysPAG

Inputs to PHYSPAG – recommendations

(to be further refined)

- 1. Continue mission studies (with modest funding) building on CST report (completes E/FY14)
 - 1. Process: Email to CST, then HEAD to summarize plans
 - 2. Probe class "n-cal"
 - 3. Large mission: AXSIO
- 2. Complete Technology Development Plan (goal 12/12) based on IXO/AXSIO work, but also including/emphasizing need for early funding for long-lead future technologies:
 - 1. Lead:Petre
 - 2. Make an initial recommendation for immediate investments in optics, calorimeter (tied to #1)
 - 1. Development of optics/detectors for near-term missions suitable for 2015
 - 2. 2020 decadal needs
- 3. PATR Process & Tech needs: comment on process (goal 11/12), start to update technology needs list (~1/13), develop rec. on directed vs. competed funding (~1/13)
 - 1. Leads: Reid, Falcone, Bandler
 - 2. Dates to be iterated with Thai Pham to ensure utility.
- **4. Refine science case from NWNH** (considering Astro-H, NuSTAR) & develop science requirements for FY15 mission (initial drop ~3/13) then develop an initial science case for 2020 decadal (~3/13) Organize workshops
 - 1. Leads: Smith/Vihklinin/Ptak
 - 2. Dates to be refined to tie into #2, #3

Inputs to PhysPAG – recommendations -II

- **5. COPAG common science:** Develop working group to identify where x-ray measurements can support COPAG science (Date: TBD but "soon")
 - 1. Lead: Kouveliotou, Mushotzky
- 6. Cost Working Group at APS or PAG level?
 - 1. Get history of MDL vs. as-builts
 - 2. Develop uniform requirements
 - 3. Collect information on X-ray mission
 - 4. Develop rec. for Phase A and pre-phase A funding level
 - 5. Where should project costs be "finalized" at proposal? PDR? CDR?

Next meetings

- 1. Monthly XRSAG webex
 - 1. Future of ESA/JAXA potential collaborations including Astro-I both strategic and smaller missions
 - 2. Finalize working group products, schedules
- 2. AAS in January -
 - 1. Monday afternoon 30 minute summary /status
 - 2. Thursday afternoon 4+ hours questions of logistics
- 3. In-person at HEAD meeting (potentially Friday) Topics to include presentations:
 - 1. Tech Dev Plan WG
 - 2. PATR WG
 - 3. Science WG
- 4. Working Group Meetings:
 - 1. meeting schedule to be set by each group
 - 2. Can PCOS provide telecon numbers and webex?

Lessons Observed

- Need to have more time!
- Need to do a better job of communicating the agenda/goals further in advance.
- We need a wiki how to do this??

- And an open question
 - Do we need a GAP-SAG?
 - Energies from ~50 kev ~500 keV?
 - Both 100 and 500 are natural boundaries